

100

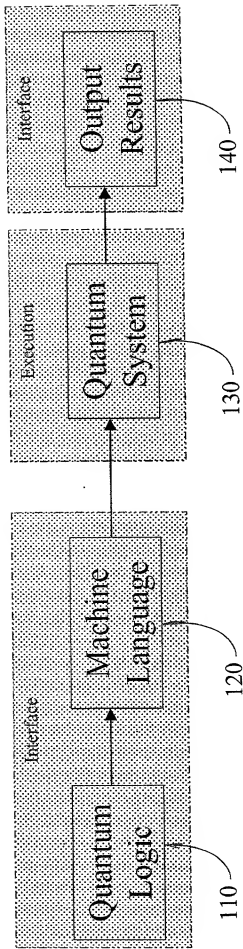


Fig. 1

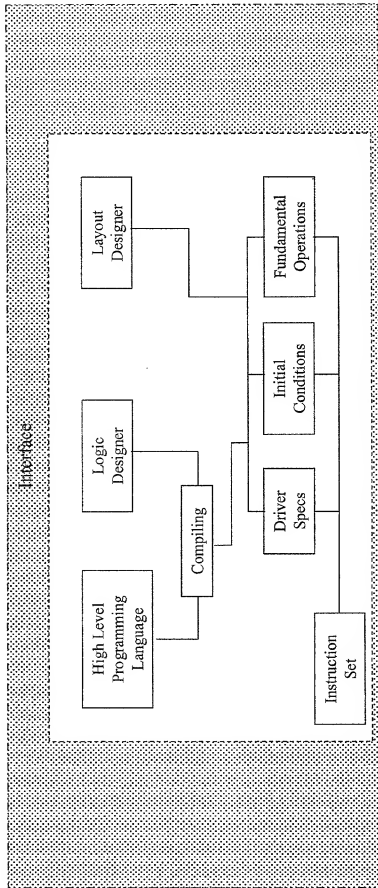


Fig. 2A

102227-16882001

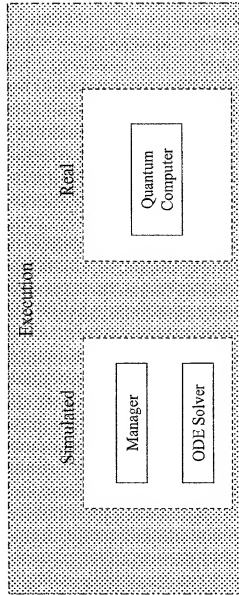


Fig. 2B

10028891.122201

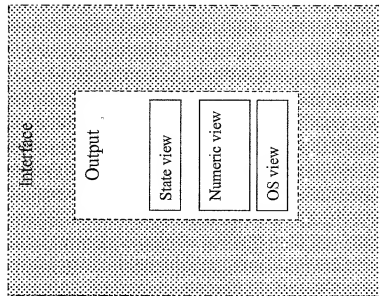


Fig. 2C

$$\begin{array}{c}
 \begin{array}{c}
 300 \quad \begin{array}{c} \begin{bmatrix} 00 \\ 01 \\ 10 \\ 11 \end{bmatrix} \rightarrow |\psi\rangle \end{array} \\
 310 \quad \begin{array}{c} \begin{bmatrix} 0 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix} ; \hat{\sigma}_x^1 = \end{array} \\
 311 \quad \begin{array}{c} \begin{bmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \\ 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix} ; \hat{\sigma}_x^2 = \end{array}
 \end{array} \\
 \\
 \begin{array}{c}
 320 \quad \begin{array}{c} \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & -1 \end{bmatrix} ; \hat{\sigma}_z^1 = \end{array} \\
 321 \quad \begin{array}{c} \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & -1 \end{bmatrix} ; \hat{\sigma}_z^2 = \end{array} \\
 340 \quad \begin{array}{c} \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 \\ 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} ; \hat{\sigma}_x^1 \hat{\sigma}_z^2 = \end{array}
 \end{array} \\
 \\
 \begin{array}{c}
 330 \quad \begin{array}{c} \begin{bmatrix} 0 & -i & 0 & 0 \\ i & 0 & 0 & 0 \\ 0 & 0 & 0 & -i \\ 0 & 0 & i & 0 \end{bmatrix} ; \hat{\sigma}_y^1 = \end{array} \\
 331 \quad \begin{array}{c} \begin{bmatrix} 0 & 0 & -i & 0 \\ 0 & 0 & 0 & -i \\ i & 0 & 0 & 0 \\ 0 & i & 0 & 0 \end{bmatrix} ; \hat{\sigma}_y^2 = \end{array}
 \end{array}
 \end{array}$$

Fig. 3

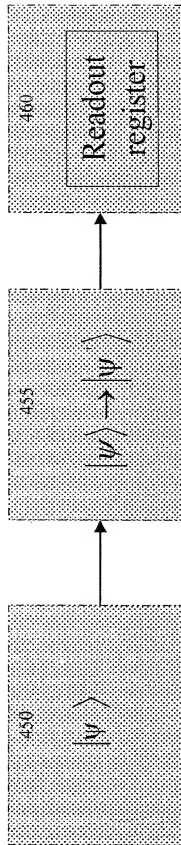


Fig. 4